THE WESTERN FARMER,

DEVOTED TO AGRICULTURE, HORTICULTURE, AND RURAL ECONOMY.

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From the Farmer and Gardener.

Sowing of Grass Seeds.

Such farmers and planters as may not have put in their grass seeds last autumn should do so as soon as the frost is out of the ground. For *clover*, there is but one opinion as to the superiority of spring sowing, and although many give the preference to sowing timothy seed in August, still there are those, whose opinions are worthy of consideration, that advocate the practice of setting it in spring on the growing wheat or rye: so also, indeed, with respect to almost every other of the artificial grasses.

If you intend to sow *clover* seed alone on your grain fields, you should not think of seeding less than from 12 to 16 pounds to the acre.

Timothy, if sown alone, should be in the proportion of from 2 to 2½ gallons of seed to the acre.

Rye Grass alone 2 bushels to the acre.

If *Clover* and *Timothy* be sown together, from 10 to 12 lbs. of the former seed and a peck of the latter would not be found too much.

If you purpose carrying your mixture still further, sow 10 lbs. of clover seed, 6 quarts of timothy, ½ bushel of herd's grass to the acre,—or

Of *clover* 8 pounds, *orchard grass* 1 bushel, *tall meadow oat* 1 bushel, and *herd's grass* ½ bushel.

In Europe the following is in many districts a popular mixture, 2 bushels of *rye grass* seed, and from 12 to 20 lbs. of *clover* seed to the acre.

It is usual to sow the orchard and tall meadow oat in early autumn, but there is no question that they would succeed now. The orchard grass should be moistened with water and permitted to remain so for a day before sowing.

Whatever grass seeds you sow on your winter grain, be sure to pass a light harrow, and roller over them. You need not apprehend any injury to your grain, for although some roots may be dragged out, you will be more than remunerated by the addition you will receive from the tillering of the branches of the plants which will be imbedded in the soil during the process. That the grass seed will derive advantage from being thus securely placed beneath the soil, common sense and reason both concur in affirming. They will be much more likely to escape destruction from birds than if left upon the surface; they will vegetate with greater certainty, and being well fixed in the earth, their roots will be much better able to withstand the droughts of summer and the frosts of winter. We need not say that the operation of harrowing and rolling should be performed when the ground is in a state to bear the treading of the horse without injury, as it will strike the intelligent reader that if done when the ground is *wet*, much injury will result to the grain.

Lucerne.—Those who may feel disposed to try their fortune with this valuable grass, can do so as soon as the ground is relieved from the frost and dampness. It should be sown on a dry rich soil, which has been previously well cleaned. From 16 to 20 quarts of seed should be sown. It may be put in with the spring barley and oats. In England and Scotland it is frequently cut four times in a season.

Oats.—The earlier, after the frost is out of the ground, that you get your oats in, the better, and if you can possibly spare them, from your other crops, a portion of manure, do so; for you may rest assured, notwithstanding custom has allotted them to grow on the poorest part of the farm, unaided by nutritious substances of any kind, they would be all the better of a dressing of something calculated to urge them forward. It is to be sure in the general by no means

a profitable crop, but then it is a most necessary one, and, therefore, should find favor. But should there be no manure to spare, do, if you can, give the soil an extra ploughing, and thus in part atone for your neglectful culture. We often hear farmers complaining of the degeneracy of, and the falling off of this grain in weight, and may not this be accounted for in the fact, that they are generally grown on the very poorest spots that are to be found, and left to grope their way to maturity in the best way they can?

Two or 2½ bushels to the acre is the proper quantity of seed. They should be well harrowed in.

Potatoes.—Should the weather admit of it, you should get in your *early potatoes* from the middle to the latter end of March. But you should not dream of reaping a good crop unless you are liberal in your bestowal of labor and manure in the preparation of the soil. Your ground should have a southern exposure, and either be a good soil naturally, or be made so by art. It should be thoroughly and deeply ploughed and harrowed; then strike your rows about 27 or 30 inches apart, place your sets about 10 inches distant from each other, throw in your rows a goodly portion of unfermented stable manure, then cover them with the soil, either by running a furrow on either side, or by hand-hoeing. In either event, no *clods* should be permitted to come in contact with the sets. As soon as there is the least indication that the potatoes are coming up, run the harrow crosswise the rows; when the potatoes are up two or three inches, plough a furrow on either side from the potatoes; this must be replaced by throwing the furrow back again. This process will greatly improve the tilth of the soil, and thereby afford the young potato plants an additional chance of moving onward in their growth. After the furrow is thrown back, the rows should be gone over with a hand-hoe, cleaned of all weeds, and so regulated as neither to retain too much moisture, nor to present a surface that would easily suffer by drought. In two or three weeks more another ploughing and hoeing will be necessary; for it is important to keep the ground stirred and clean. This second ploughing however should not be so near to the plants in the rows as the former; and after this, the *cultivator* instead of the plough must be used to complete the work in about two or three weeks, which will be determined by the advance of weeds, and the wants of the potatoes.

Carrots and Parsnips.—As soon as the frost is entirely out of the ground, you may begin to sow the seeds of these roots, for field culture, and thence up to the 1st of May, the sooner they are in the larger will be their yield, and as they are alike excellent as food for man and beast, we have always been surprised that comparatively so few were raised. An acre, well prepared and cultivated, in suitable soil, will yield from 500 to 600 bushels, which would be sufficient to keep four cows fully to their milk during the winter.

Manure.—Carry out your manure to your fields in which you intend to use it. If you intend to top-dress your meadows, or growing crops of grain, the sooner that is done the better, taking the precaution never to let your wagons or carts go on either when the ground is soft.

Lime.—If you intend to use any this season, it is time you had made your arrangements for procuring or burning it. If intended to be used on your meadows, the sooner the better it is spread thereon; if on your corn ground, you cannot get it on too early, as it should receive sufficient ploughings to thoroughly incorporate it with the soil.

Ashes.—Do not omit to provide yourself with a sufficient quantity of this delightful substance; to give your corn plants a dressing, however trifling the quantity applied, it will speak out most eloquently.

Fences.—See to your fences and have them thoroughly repaired, and thus secure yourself against the inroads of stock of all kinds.

Tools and Implements.—These must be examined and put in order,—and in fact at this critical period of the year, the farmer should have his eyes on the search in every direction.

Cure for Acute Rheumatism.

TAKE a quarter of a pound of saltpetre, melt it near the fire in a quart of vinegar, and rub the part affected with it twice or thrice a day, for about half an hour. If this does not effect a cure, the warm or vapor bath should be resorted to, as they are excellent remedies for that disease.

The Life of the Husbandman.

"I AM a true laborer. I can earn that I eat, get what I wear, owe no man hate, envy no man's happiness: glad of other men's good, content with my farm, and the greatest of my pride is to see my ewes graze and my lambs suck."—SHAKSPEARE.

We have come to the conclusion, that nature's truest nobleman is the man who earns his bread by the sweat of his face, upon his own bought and paid for plantation. An independent Farmer may stand upon his house-top, and say to himself as Selkirk did:

"I am monarch of all I survey;
My right there is none to dispute;
From the centre all round to the sea,
I am lord of the fowl and the brute."

He is truly a monarch—with a landed title more secure than that of feudal Lord or Baron,—more easily protected and preserved, not by deeds of valor, and through the shedding of blood, but by the lawful labor of the hands. His house is his castle, his acres are his dominions. His gardens are his parks, his grass plats his lawns, and his forests his groves. His cattle, sheep and poultry are subjects, and he becomes, at pleasure, either the executioner or the multiplier of such subjects. Tell us if the King upon his throne has more power worth possessing. His happiness we know is less, as he increases his toils, cares and sorrows, in proportion as the cultivator of the soil diminishes his.

In the spring time he sows, in the autumn he reaps. Providence has assured him that spring time and harvest shall not fail, and he has the assurance of the Giver of every good and perfect gift, that as he sows so shall he reap. His grounds are watered in the season of drought, with the rains and dews of Heaven, and in the damp season the sun shines to cheer, invigorate, and give promise to his labors. The severer tasks of the summer are succeeded by the lighter labors of the winter. As we have said in the words of Will Shakspeare, he "earns that he eats, and gets what he wears," and his philosophy is that of the shepherd who said that "good pastures make fat sheep." He may say truly, and with an honest pride—

"I eat my own lamb,
My chickens and ham,
I shear my own fleece and I wear it."

What could a man want more; and how can a farmer, capable of enjoying life, possessed of his farm house, his farm, and his necessary implements of husbandry, ever sigh for a residence within the enclosures of a city,—choosing bricks and mortar, for the elbow room of a spacious farm house, the smoke and dust of the town for the village, the three or four story brick house for the granary or the haycock,—the purest air of heaven for the atmosphere of a thousand smoky houses, and ten thousand unwholesome breaths? How could a farmer make such a choice as this? We would pause for a reply, did we not know that the only answer which could be devised, after a long study, would be the unsatisfactory one, that something better was anticipated only,—for it would be a miracle almost, for a man to find himself happier or in better circumstances after a change of residence from the country to the city.—No,—no. The true Elysium,—the real Paradise on earth, is the country,—the green, fruitful, beautiful country. The city for the taskmaster and his hard-working servant; but the country for the man who wishes for health and leisure,—contentment and a long life.

The ancient Romans venerated the plough, and in the earliest, purest time of the republic, the greatest praise which could be given to an illustrious character, was a judicious and industrious husbandman.—*Portland Advertiser.*

"TIME is my estate,"—*Philosopher.*

From the (Va) Farmers' Register.

Carelessness in Saving Silk-Worms' Eggs.

Stafford, Aug. 5th, 1839.

To the Editor of the Farmers' Register.—I am highly gratified that you have given the agricultural community a caution about silk-worm eggs. At least two-thirds of the failures in rearing silk-worms in this country may with propriety be attributed to bad eggs. Many persons raise silk-worms for the *sole* purpose of speculating on the eggs, and are probably not aware of the necessity of careful management to procure good eggs. Prevailing thoughtlessness on this subject, which I know exists extensively, if not checked, will throw serious obstacles in the way of this important culture, which I firmly believe is destined to repopulate the poor land districts in Virginia and Maryland. I will add a caution which may be of service to the inexperienced. If the cocoons intended for seed are thrown into a heap, and permitted to remain for several hours, when the weather is warm, the eggs produced will generally be worthless. I know this to be the fact from dear-bought experience.

"When silk-worms are to be raised, the eggs to be procured from the cocoons, must be thought of before any thing else. Now-a-days when the cocoons are collected, it is the custom to keep them altogether upon the frames. Some persons not having time to reel all their silk, butterflies are seen to go out and lay eggs almost immediately. The accumulation of cocoons produce a kind of fermentation, and the heat causes the butterflies to hatch before the proper period. This premature development has never any good results, for the butterflies are sick; and from thence it comes that the silk-worms produced from their eggs, are affected by diseases from the moment of their hatching.

"The cocoons for reproduction ought to be separated, *and put in a well aired chamber*, and spread upon very clean mats, *a layer of the thickness of a single cocoon only*." (*Chinese Treatise, published by P. Force, p.* 150.)

I have about 40,000 silk-worms of seven varieties.—They are remarkable healthy, and a large portion of them spinning in handsome style.

Respectfully yours,

LAYTON Y. ATKINS.

P. S. There is no advantage to be derived from a forced and premature development of the silk-worm in any of its stages. The nearer the time of spinning to the natural period of its life, as stated by Dandolo, the better. The *precocious* and the *tardy* are always feeble, and eggs should never be saved from them. I have made nine rearings of the "two-crop" white, and of the cocoons formed between the 25th and 30th days it has required from 700 to 800 to weigh a pound, and so of the last which spin; but of cocoons formed from the 30th to the 35th day, 350 to 400 make a pound. Depend upon it, modern writers on silk-culture are promulgating a pernicious error on this point; and before the learned *silk-worm* doctors publish any more *infallible* prescriptions, I advise them to put on their spectacles and bring their remedies to bear on four or five cases.

If a *forced* and premature development is so important, what reason or sense would there be in the following passage from the Chinese Treatise:

"The moths which come out the first day are called *grass moths*. The last of all are called *mogno*, (that is to say, the last, butterflies.) *Neither* of these ought *to be kept*."

Mark the care of this people about procuring eggs. Cocoons are first selected, and when the butterflies come out, the *first* and the *last* are rejected. Let the people of the United States make numerous and careful experiments. We *beardless* boys of Virginia at least, do not mean to open wide our mouths and swallow nostrums as an unfledged bird does its food. L. Y. A.

Benefit of "Hard Times."

One effect which it is supposed the present state of times will have, may be looked upon as decidedly advantageous, and that is in the greater attention which it is probable will now be given to agricultural pursuits. The fertile, uncul-

tivated lands, with which portions of our country abound, have been too much overlooked, and we presume will be more carefully looked after. The life of a farmer has more attractions, by far, and more solid, substantial comforts than the multitude seem willing to concede. Too many have, of late years, left its quiet and healthful pursuits, to crowd into the already over crowded cities; forsaking with most perverted tastes, the green fields and fine atmosphere of the country, for the dust and noise, and confined air, that is found in streets and alleys. We think attention will be now strongly turned to the cultivation of the soil, by thousands whom the embarassments of the times have deprived of employment, and as a consequence, provisions of every kind, will be more abundant and cheaper. It is time the current should set the other way, and if the distress under which the whole country now suffers, has the tendency to divert labor into its more appropriate channels, we may find that even this affliction has not been without its advantage.—*U. S. Gazette.*

Domestic Habits of Ladies.

Many a man has owed his success or failure in business as much to the management of his wife, as to his own individual actions. Though domestic occupations do not hold the high rank to which they are justly entitled, yet there is reason to believe that the prevailing sentiments are gradually undergoing a change; that females see more and more the propriety of possessing the ability to overlook and wisely direct the expenditures of that part of the husband's income which fall under their own immediate inspection; and that they are the most deserving characters, whatever their situations, who best perform the duties which those situations require. We believe that at the present day, the instances are more common where ladies in the higher classes of society deem it no disparagement to be familiarly acquainted with all the internal concerns of their families. This is considered not only a matter of choice, but as absolutely necessary if they would maintain that character and influence which they are destined to maintain in society. Yet to the shame of many a mother it must be spoken, that their daughters are suffered to come forward in life unprepared to fill any situation with usefulness and dignity. They are instructed in the *elegant* but not in the *useful* arts of life; and the result will be as it often has been, where there is no security for the possession of wealth, that they will be obliged to exchange the voluptuous dream of life spent in feasting on silver and dozing amidst curtains of velvet, endeavoring to account for the strange inconsistency in the events of real life and the promises of romance—to exchange these, and undergo every drudgery and every humiliation for the wages of lackeys. There is much truth in the remark, that "to paint is well; to play the piano is well; to embroider is well; but to be able to make a pudding is better than all."

To extract Insects from the Ear.

Let the head of the person who is afflicted under this distressing circumstance, be put upon a table, the side upwards which is painful; then let some friend carefully drop into the ear a little sweet oil, or oil of almonds, which will instantly destroy the insect, as well as remove the pain, however violent.

To Cure Chilblains.

Soak them in warm bran and water, then rub them well with mustard-seed flour. To render this method more efficacious, it will be better to apply it before the chilblains are broken.

On Feeding Cattle.

It is not good policy to suffer our neat stock to grow poor at this season of the year, and there is no need of this, if we pay proper attention to the subject. This is the season to make use of our white turnips, and our pumpkins, which will not keep long, and store cattle, as well as those we are fatting, should all have a share. Milch-cows need something of this kind to prevent their becoming dry at this season, and roots and green leaves are more suitable

for this purpose than any kind of hay, and are more agreeable to the palates of the cattle.

Hay, of all kinds, at this season, affects the milk, and is apt to give a better taste to the butter. Corn-stalks and husks have not any such effect, and therefore these should be dealt out in the fore part of winter, while the cows are in milk.

Cows, when well kept, should never go dry longer than two months at a time. They are not better in summer for having gone dry a long time in winter. They should be *in the habit* of giving milk through most of the year. It is true they need better keeping while in milk, but the value of the product will do more than repay the expense.

If it be too cold to make butter, the cream may be used to advantage without churning; and all the wash is wanted for the store hogs—it will cause them to grow faster than will any kind of food.

Calves require particular care in the first of the winter. Rowen hay and roots, in small quantities, are excellent for them.

Cattle of all descriptions lie more comfortably, loose, than when fastened to a stanchion, but they require more room. They seldom suffer in New England from cold, provided they are out of the wet and out of the wind. Open sheds and open barn cellars are to be preferred, especially for young cattle, to tight barns, where the air is soon rendered unfit for respiration.

It is as absurd to suppose that cattle are more healthy for being closely penned up in winter, as that human beings are, when shut in a close room. Females who seldom go out in winter have more colds—three to one—than those who are every day exposed to the weather.

If we have not room for our cattle to run loose under sheds or barns—if we must tie them up to a post and compel them to stand 16 hours in one position—let us not compel them to stand on plank floors—let us throw a quantity of loam under them, that it may become impregnated with the liquid manure, that nothing may be lost.

We have often seen cattle so stalled, that all the liquid manure was wasted—and this liquid would have been worth as much as all the other part, in case of proper care to have it absorbed.—*Boston Cultivator.*

Domestic Buckwheat Cakes.

To three pints of buckwheat flour mixed into a batter, add one tea-spoonful of carbonate of soda, dissolved in water, and one spoonful of tartaric acid—dissolved in like manner; first apply the carbonate, stir the latter well, and then put in the acid—thus the use of yeast is entirely superseded, and cakes 'as light as a feather' are insured. One great advantage is, that the batter is ready for baking as soon as it is made.

The Sugar Beet.

The culture of this root has, in many instances, been attended with extraordinary success. The Harrisburgh Keystone gives in the following extract of a letter from Judge Lewis, some important testimony upon the subject:

"In the month of April last, I planted about an acre of sugar beets, for the purpose of feeding the cattle during the winter season. The ground consisted of several patches, some of which had been used for potatoes the year before. After it was properly prepared, deep furrows were run through it two feet apart, in which manure was afterwards deposited, which was covered by running a furrow on each side of the first, and thus forming a small ridge over the manure. Along this the beets were dropped by means of a species of hand drill of my own invention, composed of a piece of 2 inch plank, about a foot long, in the shape of a triangle, with three old harrow teeth formed like small shovels of the proper shape, and a handle of about 4½ feet long, with a calibre about the size of a rifle bore, through which the seed were made to descend into a furrow formed by the front tooth; they were covered by the two hind teeth. The seed were deposited in the row about a foot apart. On the 1st of

November, ult. the beets were taken up. The product of 440 feet was weighed on the hay scales, and amounted to 620 pounds, which, counting 60 pounds to the bushel, would be 13½ bushels. The whole product of the acre at this rate is 1353 bushels. This will ensure me plenty of good milk and butter during the winter, and may serve to show that the beet is worthy the attention of farmers who have no intention to make sugar. I consider a bushel of beets nearly equal in value to a bushel of oats. 1353 bushels at 30 cents would make the yield of an acre $405 90."

As we ourselves dabble a very little in farming, we will add the particulars of an experiment of our own in raising the sugar beet.

A patch of three quarters of an acre was twice ploughed *very* deep and *very* richly manured with stable manure, after having been well *limed* (100 bushels to the acre) the preceding year.

The seed was planted by hand in drills, and when the plants were up they were thinned out by hand, so as to leave them about a foot apart in the drill.

The ground was kept tolerably free of weeds till the plants had obtained a considerable growth, after which they were not much attended to.

The beets were gathered during the first week of this month, and the produce was 650 bushels—weighing fourteen tons six hundred!

The hogs and the cows eat them greedily, either raw or boiled. The horses as yet refuse, although mixed with meal—or sprinkled with salt—or whether raw or boiled.

The value, however, of these vegetables for milch cows is very great. It improves both the quantity and quality of the milk, without imparting to it any disagreeable flavor.—*Albany Paper.*

From the N. E. Farmer.

Speculation.

THIS word has become absolutely odious to almost all the sober and reflecting part of the community, and cannot sound very melodiously in the ears of many, who can lay no claims to being either sober or reflecting. It is no better in general than arrant gambling; and its tendency is to disturb all the common pursuits of fair trade, and stop the operations of wholesome industry. A man who lives by speculation entirely, is in general living upon the necessities or weakness or ignorance or follies or vices of other men. This is a poor trade; and such men are commonly the curse of the community. A man buys a piece of land to-day and sells it to-morrow for twice as much as he gave. The next purchaser gets an advance upon it, and so it passes on through successive hands, without any improvement of any description whatever being made in it. Now who is benefited by such an operation? The community is not, most certainly.

A man buys into some public stock. He to-morrow sells his shares to another man at an advance; and so it goes on, passing through various hands without any change whatever in the property disposed of. Now who is benefited by this operation? Certainly not the community, for not a cent of intrinsic value is added to the property. No wealth is created; and no increased value is given to the property in question by the operation, let the transfer of the property pass through ever so many hands. But there is a serious injury to the community by all such operations. They excite extravagant expectations. They induce men to desert their farms and their trades, that by some chance adventure they may get rich without the slow processes of frugality and labor. Successful speculations of this nature too often ruin the operator himself, either by inducing him to hazard every thing in a single cast of the die, or hurrying him on in his miscalled prosperity into deeper kinds of gambling, and too often impelling him into courses of extravagance, luxury, dissipation and profligacy, absolutely ruinous and dreadfully fatal. H. C.

Depend upon your own Exertions for Support.

THIS is an excellent principle for the working and trading classes of the com-

munity to adopt, but the true philosophy of it is scarcely understood. Notwithstanding the many ties that connect a man with society, he nevertheless has imprinted on his forehead the original doom, that he must be chiefly dependent on his own labor and exertions for support. It is an incontrovertible fact, founded upon general experience, that where a man trusts to his exertions in life, he generally succeeds, if not in amassing a fortune, at least in obtaining a comfortable living. On the other hand, he who depends upon others for his success in life, often finds himself wofully disappointed. Nothing gives so good an assurance of well doing as the personal activity of a man daily exerted for his own interest. But should the same individual find himself suddenly offered a patronage likely to enrich him, or fall into the heritage, or some supposed heritage, of some antiquated claim to property, which he thinks it necessary to prosecute—it is ten to one, that he ceases to be industrious from that moment, and is finally ruined. The only true way to make a happy progress in this world, is to go on in a dogged, persevering pursuit of one good object, neither turning to the right nor the left, but make our business our pleasure as much as possible, till we find ourselves at the goal of our wishes, with a fortune almost unconsciously in our possession. Humanity, kindred, friendship, have their claims upon us, which we should always consider and look upon with good and proper feelings; but not injure ourselves by giving too freely to relieve the wants of others, we should be just, kind, and affable to all; and endeavor to instil into the minds of others, the same spirit of industry and perseverance that animates us, enjoining them always to remember that success in life is more certain of attainment by their own unaided exertions, than by any reliance for assistance upon others

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Domestic.

Cooking meat.—The preparation of meat for the table is usually performed by one of the processes of boiling, roasting or stewing; and much of its excellence as food, or value for the purposes of nutrition, is depending on the manner in which these operations are severally performed.

In boiling meat, particularly that which is salted, if the following particulars are observed, the meat will generally be properly boiled. The water that is used, is best if soft, and the meat, after being thoroughly washed, &c. should be placed over the fire in cold water, that the whole may be gradually heated, and thus boiled equally. Salted meat should never be boiled fast, it is better to be simmered only, as fast boiling makes such meat hard. Pieces of meat chosen for boiling, should be of the same thickness throughout, or they will be unequally cooked. An essential condition of boiling meat properly, and have it retain a good appearance, is to keep the pot well skimmed, and steadily but gently boiling. The coagulated albuminous matter that rises on the surface in boiling, if not removed, will attach itself to the meat and injure both its appearance and flavor. Good cooks allow thirty minutes slow boiling to every pound of meat, reckoning from the commencement of the boiling. Flesh or fish boiled in an open vessel, will leave the lean or fibrous part more tender, than if the vessel is left covered. With the farmer, more meat is cooked by boiling than in any other way, and it is, therefore, important that the best and most economical way should always be chosen.

A large part of the meat used in cities is roasted, and every one is aware how much the character of beef or mutton is depending on this operation. With regard to the manner of cooking meat in this way, the taste of no inconsiderable portion of the community appears verging to the Abyssinian standard, and we may soon expect to hear that roasting of beef is entirely dispensed with, and that it is eaten by the ultra fashionables before it has time to cool after being killed. We have some doubts, however, whether man was destined to feed on raw flesh, and believe that the nutritive effect is much increased, and the

mechanical labor of the teeth and stomach much diminished, by a proper system of cooking. The true criterion is, that the meat roasted be tender, and this cannot be done by placing it for a few moments before or over a hot fire, by which the outside is burned and the inside left unchanged or raw. The process must be gradual to be complete, and the more perfectly cooked the meat is, the better and more nutritive it will be, and the easier of digestion.

Stewing is nothing else than boiling by means of a small quantity of an aqueous fluid, water or broth, and continuing the operation for a long time to render the substance tender, the texture loose, to make it more sapid, and to retain or concentrate the most valuable parts of animal or vegetable food. The process of stewing must be conducted with a small quantity of water, the heat steady but gentle, so as to raise the fluid only to a simmering heat, and covered so as to prevent the escape of the fluid by evaporation. Much of the good quality of the dishes prepared by stewing, is depending on the management of the fire, for if the heat is too great the softening of the meat will not be as perfect, and water must be frequently added, or it would burn on to the vessel. The kinds of meat most suitable for stewing, or which are the most improved by the process, are those that abound in fibrin or lean, and which are frequently too dry or tough for roasting. In stewing, those portions of meat that cannot be eaten roasted, and are rarely boiled, as the hard muscular or tendinous parts, such as the hocks of beef, are converted into a rich gelatinous nutritive food, of the most savory kind, and can be served up with the proper vegetables, or used as gravy or soup. In stewing, the great danger is burning the meat by allowing the water to evaporate. This guarded against, stewed meats are excellent.—*Gen. Farmer.*

Management of Wood.

Felling Timber.—Something may be done towards the prevention of decay by felling the timber at a proper season. A tree may be felled too soon or too late, in relation to its age, and to the period of the year. A tree may be so young that no part of it shall have the proper degree of hardness, and even its heart-wood may be no better than sap-wood; or a tree may be felled when it is so old that the wood, if not decayed, may have become brittle, losing all the elasticity of maturity. The timber grower is more likely to adopt from interested motives, the former of these errors, and fell his timber too young. His object is to obtain as much timber as possible, but a tree is not in its maturity when it ceases to grow, for after this period its fibres gain firmness and density. The time required to bring the several kinds of trees to maturity varies according to the nature of the tree and the situation in which it may be growing. Authors differ a century as to the age at which oak should be felled, some say one hundred, and others two hundred years; it must then be regulated according to circumstances. Although the oak of our own country is so valuable to the builder, yet it is to be feared that it is seldom allowed to attain its maturity, the grower being anxious to sell and the builder to buy; the one seeking to obtain its value himself, rather than leave it to posterity, the other to purchase at as low a price as possible, not caring for the character of the timber.

But it is also necessary that the timber-trees should be felled at a proper season of the year; that is to say, when their vessels are least loaded with those juices which are ready for the production of sap-wood and foliage. The timber of a tree felled in spring or in autumn, would be especially liable to decay; for it would contain the element of decomposition. Mid-summer and mid-winter are the proper times for cutting, as the vegetative powers are then expended.

There are some trees, the bark of which is valuable, as well as the timber; and as the best time for felling is not the best for stripping the bark, it is customary to perform these labors at different periods. The oak-bark, for instance, is generally taken off in early

spring, and the timber is felled as soon as the foliage is dead; and this method is found to be highly advantageous to the durability of the timber. The sap-wood is hardened, and all the available vegetable juices are expended in the production of foliage. Could this plan be adopted with other trees, it would be desirable; but the barks are not sufficiently valuable to pay the expense of stripping.

Seasoning Timber.—Supposing all these precautions to be taken in felling timber, it is still necessary to season it; that is, to adopt some means by which it may be dried, so as to throw off all the juices which are still associated with the fibres of the wood. As soon as the timber is felled, it should be removed to some dry place; and, being piled in such a manner as to admit a circulation of air, remain in log for some time, as it has a tendency to prevent warping. The next process is, to cut the timber into scantlings, and to place these upright in some dry situation, where there is a good current of air, avoiding the direct rays of the sun. The more gradually the process of seasoning is carried on, the better will be the wood for all the purposes of building. Mr. Tredgold says, "It is well known to chemists, that slow drying, will render many bodies less easy to dissolve; while rapid drying, on the contrary, renders the same bodies more soluble. Besides, all wood, in drying, loses a portion of its carbon, and the more in proportion as the temperature is higher. There is, in wood that has been properly seasoned, a toughness and elasticity which is not to be found in rapidly-dried wood. This is an evident proof, that firm cohesion does not take place when the moisture is dissipated in a high heat. Also, seasoning by heat alone, produces a hard crust on the surface, which will scarcely permit the moisture to evaporate from the internal part, and is very injurious to the wood.

"For the general purposes of carpentry, timber should not be used in less than two years after it is felled; and this is the least time that ought to be allowed for seasoning. For joiners' work it requires four years, unless other methods be used; but, for carpentry, natural seasoning should have the preference, unless the pressure of the air be removed."

Many artificial methods of seasoning timber have been proposed; and a brief notice of some of those which have been found most useful will be required.

Seasoning by a Vacuum.—All the vegetable and animal juices are kept in their particular vessels by the pressure of the atmosphere; remove that pressure, and the animal fluids could no longer be retained by the veins and arteries, and the vegetable fluids would exude and appear on the surface of the plant. Place a small piece of wood beneath the receiver of an air-pump, and exhaust the air, and in a short time the wood will be covered with drops of the liquid which can no longer be retained, as the atmospheric pressure is removed. Mr. Langton thought that this might be applied to the extraction of those vegetable juices in timber, known to be the cause of its decay. An arrangement was therefore adopted, by which large masses of timber might be enclosed in a vessel having such machinery as would be necessary to exhaust the air, heat being at the same time employed so as to evaporize the exuded juices. The vapor is conveyed away by pipes surrounded by cold water, and is condensed into a liquid, having a sweet taste. This process is deserving of more attention than has hitherto been given to it.

Water Seasoning.—It has been stated by various writers, that wood immersed in water for about a fortnight and then dried, is better suited for all the purposes of the joiner. There can be no doubt that immersion in water tends to neutralize the effect of the saccharine matter, by dilution or an almost absolute removal. This process has also the effect of rendering the wood less liable to crack and warp; but, if we judge by Duhamel's experiments, it injures the strength of the material, and should not, therefore, be adopted in any instance where the timber is to be employed by the carpenter. Evelyn recommends boards that are to be used

for flooring, to be seasoned in this way: "Lay your boards," he says, "a fortnight in water (if running, the better, as at a mill-pond head;) and then setting them upright in the sun and wind, so as it may pass freely through them, turn them daily; and thus treated, even newly-sawn boards will floor far better than those of a many years' dry seasoning, as they call it." Timber intended for ship-building may be immersed in sea-water; but that which is to be used for houses ought to be placed in fresh water; for if timber, or any other building material, be impregnated with salt, it will ever be wet, for salt attracts moisture so readily, that it may be used approximately as a hygrometer. Plaster or mortar made with salt water, will always sweat with a moist atmosphere; and timber intended for the house carpenter, if impregnated with salt, will always be damp, or covered with a crystalized efflorescence. Much injury, however, is sometimes done by not thoroughly immersing the timber; the carpenter should therefore be careful, when he employs this method of seasoning, that the timber is entirely covered with water, and that it be not exposed to its action for too long a time.

Seasoning by Smoking and Charring.—Authors who have written upon the seasoning of timber have spoken of the effects of smoke, and the carbonization of the surface. We have adopted the same arrangement, but it will be necessary to caution the reader against a misconception of a very inaccurate expression. Timber cannot be seasoned by either smoking or charring, but seasoned timbers may be made more capable of resisting the effects of certain situations by these processes. Should a piece of timber, containing the vegetable juice, be smoked or charred, it would be a means of accelerating decomposition; for preventing all means of evaporation, the common sources of protection would become sources of destruction. But when timber is to be used in situations where it is liable to be attacked by worms, or to produce fungi, it may be desirable to smoke or to char it.

Seasoning by Boiling or Steaming. Timber is sometimes seasoned by steaming or boiling, both of which means are frequently adopted by ship-builders. The strength of timber appears to be somewhat impaired by these processes, but it is generally less liable to shrink or crack. Duhamel states that he boiled a piece of wood, and then dried it upon a stove, but, in drying, it lost part of its substance, as well as the water contained; and upon a repetition, he found that it had lost still more of its weight. Four hours' exposure to steam or boiling water is sufficient for timbers of ordinary dimensions, and the drying afterwards goes on very rapidly, but it should be done as gradually as possible. The joiner frequently finds it necessary to steam or boil wood, to bend it into a particular curve, and also the ship-builder. It has been stated by writers on ship-building, that boiling increases the durability of timber, and in proof of this, they inform us that the planks in the bow of a ship, which are bent in this way, are never affected by the dry rot.

It may now be inquired whether, after the most perfect seasoning, timber is secured against the process of decay? To this question a negative answer must be given.—However well the timber may be seasoned it will certainly rot if placed in a damp situation, the rapidity of the decomposition depending upon the nature and state of the wood and the activity of the destroying agent. As the builder seldom attempts any other seasoning than that which depends upon drying his timbers, it is absolutely necessary that he should carefully avoid the rise of damp, and adopt every means in his power to prevent this evil. Timbers are usually placed in contact with walls, but it must not be supposed that this is sufficient to keep them from the access of damp, for they are frequently the conducting media. Brick-work very readily absorbs moisture, and also throws it upwards, so that the ends of timbers are in contact with the very source of mischief. To prevent the rise of damp upwards, it is common to use, for a few feet above the foundations, cement, a

substance impervious to water, instead of mortar, or to place between the courses zinc or slate.—But that these plans may be effective, the basement walls should be surrounded with an open area, for, if in contact with the earth on their sides, they can be of no value. To prevent dampness from entering in front, the brick-work should be covered with compo, or some substance impermeable to water.

Another thing to be considered, for the security of timbers, is to arrange, in every plan of a building, for a perfect circulation of air. Ventilation is a most important requisite in the construction of a building, although it is generally a matter of very little importance in the consideration of those who have to plan or construct buildings. The ventilation of roofs is by no means difficult, but there are often so many obstacles to the ventilation of flooring, that the designer will not give sufficient attention to his subject to provide against them. These things, however, are not matters of speculation, to be attended to by those who have no higher employment, but are absolutely necessary for the construction of a work that is intended to survive the builder.

But we must pass from this subject to a consideration of some of those plans which have been proposed to secure well seasoned wood from the effects of dampness, and the ravages of insects, though it must be confessed that but few of them have been successful.

Attempts have been made from a very early period to prevent the destruction of wood, by impregnating it with some substance capable of restraining its ravages.—The muriate of soda, or common salt, has been thought a good preservative against decay, when the wood is thoroughly impregnated with it. The wooden posts which support the roof of a salt mine are said to be preserved by the constant infusion of salt, and that a vessel covered with fungus will have her timbers cleaned by immersion in salt-water. Whatever may be the advantages of this process, it is quite certain that it can never be extensively employed, for the salt absorbs water so readily, that the timbers would be constantly damp.

In the year 1670, a Mr. Jackson proposed to immerse timber in a composition of muriate of soda, Epsom salts, lime, potash, salt-water, and other substances; but neither he nor any body else could ever discover the value of this process. This person was permitted to prepare some timber to be used in the national yards, and it was found that vessels built with it was less durable than those in which unprepared wood was used.

Sulphate of iron, or green copperas in water has been recommended as a good mixture, in which to place wood, that is to be used for the purposes of building. It is said that timber boiled in a solution of sulphate of iron, becomes so hard when dry, that moisture cannot penetrate it. This may possibly be the case, but the change must be effected by the removal of some portion of woody fibre, and the admission of the sulphate in its place in the same manner as the wood found in the London clay has been fossilized by that substance.

Lime has been recommended as a preservative against the decay of timber. There is a difference of opinion among writers as to the value of this substance, for the particular purpose. It is well known that quick-lime with moisture rapidly destroys vegetable matter, but Mr. Tredgold says, that a large quantity of fresh quick-lime in contact with wood, absorbs the water, hardens the sap, and thus, keeping it in a perfectly dry state, renders it very durable. This gentleman quotes the opinion of Mr. Chapman, who says, that vessels employed in the Sunderland lime trade have been forty years old without needing any repair, or showing the slightest evidence of decay in the timbers. A writer, who recommends the impregnation of wood with lime, says, that wood buried in the earth, and surrounded by lime, is protected from the ordinary causes of decay. But Dr. Birkbeck objects to the plan, for he says, assuming such principle to be correct, there is a great inconsistency as to the effects produced upon animal and vegetable mat-

ter, and there can be no doubt that the substance which destroys one, will destroy the other.

The attention of scientific men has been recently directed to the experiments made by Kyan, and from the very excellent exposition of his plan, by Dr. Birkbeck, we are induced to hope that it may be found highly advantageous. Having made a great number of experiments with a view to ascertain the primary cause of vegetable decomposition, he was at last convinced that albumen was that cause, and that to neutralize its effects would be to prevent decomposition. Some plan was required similar to that adopted in tanning. The gelatine in animal bodies is quite as liable to decomposition as the albumen of vegetables; but when tanning, the infusion of oak bark, is combined with it, the destructive properties are lost, and the animal matter becomes durable, and almost incapable of decay. Reasoning upon this effect, Mr. Kyan imagined that it might be possible to prevent vegetable decomposition by causing the albumen to form a combination with some other substance; and knowing the affinity of corrosive sublimate for the albumen, he entered upon a series of experiments, which led him to propose the use of that substance as a protection for timber.

A few extracts from the published lecture read by Dr. Birkbeck, before the Society of Arts, may put the subject more clearly before the reader.

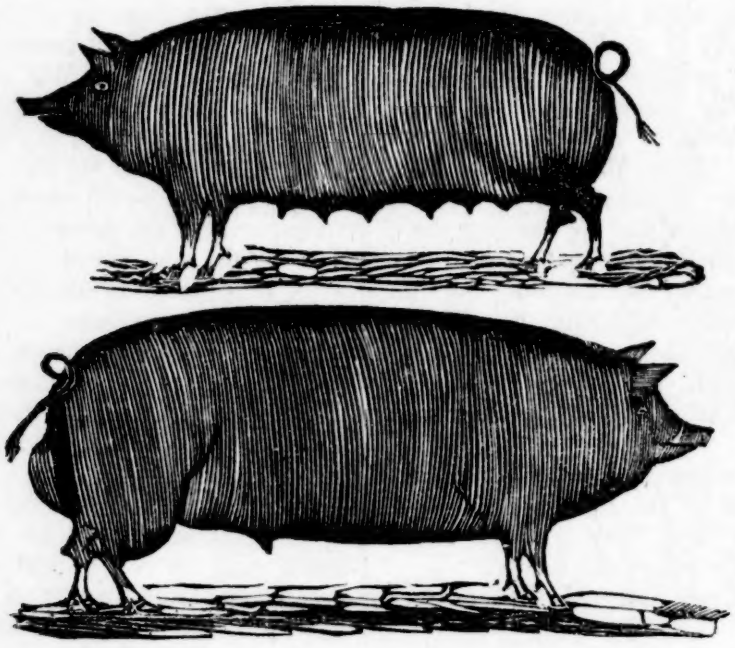
"Mr. Kyan inferred that, as wood consists of various successive layers, in which the albumen, or juices containing albumen, circulated freely; it is quite certain that, as these juices within the wood, with the watery parts, fly off by the leaves, that the albumen remains behind, and it is probable that this albumen, which from its nature is peculiarly prone to enter into new combinations, is the thing in wood which begins the tendency to decomposition, and produces ultimate decay, whether that decomposition is attended with the formation of cryptogamic substances, or whether in the less organized form, the change occurs with the simple production of what has been called the Dry Rot. He (Mr. Kyan,) conceived, therefore, if albumen made a part of wood, the latter would be protected by converting that albumen into a compound of protochloride of mercury and albumen; and he proceeded to immerse pieces of wood in this solution, and obtained the same result as that which he had ascertained with regard to the vegetable decoctions. Having done so, it became necessary to employ various modes of experiments as well as comparative experiments. Now it is not clear in what part of the wood the vegetable albumen may be found, though it exists more especially in that part of the tree which is denominated the alburnum or sap, and is found between the heart wood and the innermost layer of bark. The experience of all practical men has confirmed the opinion that this portion of wood is the first to decay.

"It is probable that, as the alburnum becomes successive layers of wood, it loses a quantity of albumen; or that, in consequence of the pressure which takes place by the addition of each successive layer, it becomes so situated, as to lose a part of its exposure to the vessels where a change may occur, and therefore becomes in some measure protected: for that which is one year alburnum or sap, may be, and indeed generally is, proper wood the next.

"The mode in which the application of the solution takes place is in tanks, which may be constructed of different dimensions, from twenty to eighty feet in length, six to ten in breadth, and three to eight in depth. The timber to be prepared is placed in the tank, and secured by a cross-beam to prevent its rising to the surface. The wood being thus secured, the solution is then admitted from the cistern above, and for a time all remains perfectly still. In the course of ten or twelve hours, the water is thrown into great agitation by the effervescence, occasioned by the expulsion of the fixed air in the wood, by the force with which the fluid is drawn in by chemical affinity, and by the escape of that portion of the chlorine, or muriatic acid gas, which is disengaged during the

process. In the course of twelve hours this commotion ceases, and in the space of seven to fourteen days, varying according to the diameter of the wood, the change is complete, so that as the corrosive sublimate is not an expensive article, the albumen may be converted into an indecomposable substance at a very moderate rate, and the seasoning will take place in the course of 2 or 3 weeks."

Mr. Kyan's method of seasoning has been already tested under circumstances so severe, that they may be said to have proved its efficiency. A piece of oak was five years in the fungus pit in Woolwich yard, a place notorious for the rapid and almost instantaneous destruction of vegetable matter, and it was as sound when taken out as when put in. This was the most severe test to which the method could be subjected, and its having sustained the trial is a proof of the value of the discovery. It has, however, been objected to the process, that the impregnation of timber with corrosive sublimate must unfit it for use in ship-building; but Mr. Kyan has furnished evidence to the contrary, and in our opinion proves that salubrity is one advantage. We strongly recommend the builder to make experiments himself upon wood prepared by Mr. Kyan, by using it in places where decay is rapid.



For the Western Farmer.

Berkshire Hogs.

The possession of superior breeds of animals is an acquisition of which every farmer should feel desirous; and no expense, within his means, spared to secure such.

We allude especially to the swine, and particularly the Berkshire breed; its propagating and rapidly growing nature being such as to indemnify all extra costs, and in that way at least materially enriching him.

It does not at all seem improbable that they will command an almost universal preference whenever they shall become well known and of lower price; and it is believed America has in the Durham and Berkshire breed the finest animals of their species in the world. Hitherto at all Cattle shows their pre-eminence has been attested and admitted for very *weighty* considerations, and in every particular constituting points of superiority,—viz: they are great breeders; mature uncommonly early, as will be shown,—of unequalled propensity and facility to fatten, and capable of being

made fine porkers of two and three hundred pounds in less than twelve months from the time they are littered. Their meat is both excellent and abundantly proportioned, easily cured, and the bone particularly small.

On what others would merely exist, they would thrive; the quantum actually necessary is surprisingly small, yet are they great eaters, and as such will they testify by voracious appetites and correspondingly rapid growth.

The unmixed Berkshire breed are generally black, with some few white spots, hair very thin and coarse, bristles scarce, if not wholly absent sometimes; head, legs and neck short, the latter plump and full, and the back broad;—these constitute, we believe, their peculiar marks, and they are thus easily distinguishable from other breeds.

At the last Agricultural exhibition in Worcester, Mass., were exhibited some eighty head of choice breeds of swine. The Berkshire stood pre-eminent—commanded the most unqualified praise and claims to superiority over all, notwithstanding equal pains had been taken by owners of other fine breeds. A Berkshire boar, six months old, weighed two hundred and seventy pounds, and another, seven months, two hundred and fifty pounds, besides similar instances, but not quite so extraordinary.

The readers of the Western Farmer will remember the report of the Miami Agricultural Society last fall, at whose exhibition the Berkshire breed secured the highest premiums, and will also recall to mind that portion of its President's Address, so much in point as to deserve quotation here: "There is," says Mr. Clarkson, "no class of animals (i. e. the hog) in which the farmer and commercial man has a deeper interest throughout the United States, and in this region especially; &c. and it is of the highest importance that we should avail ourselves of the very best breed of swine. From my own experience of rearing as well as the packing of hogs, I believe the Berkshire, crossed on the Byfield, produces the best breed that can be found in our country, for they attain a fine size at a very early age."

Happening to be present in the city, where a personal and proper comparison offered between the relative merits of this breed and others,—it was improved. Back to back were suspended two porkers slaughtered that morning—one, the common sort, two and a half years old, and might weigh, it was supposed, from 150 to 175 pounds.—The other, a true Berkshire, the owner said was fourteen months old and would weigh, he thought, about 300 pounds. These two had been penned together about seven weeks, the latter previously running the streets and having no advantage over the common sort. There were also two others, Berkshire crossed on the Byfield, littered but seven months previously, and might weigh 120 pounds. In favor of the pure Berkshire there was a gain in weight, time, and we may add food and labor, of nearly 100 per cent.

With a view to satisfy my own mind by actual observation of their reported merits, I obtained both the unmixed Berkshire and the Byfield, as well as their cross. The first cost me fifty dollars a pair when three months old, others have paid one hundred dollars and upwards, to secure this breed on their farms. Should they realize their reported claims to public attention, all things considered, those extraordinary prices will be compensated by a saving and a profit far transcending the outlays. At the same time the farmer should never forget Crockett's principle in all improvements in which their business is so susceptible—"Be sure you're right—then go ahead."

T. H. A.

Elm Spring Farm, Ky

Blue Ink.

THE blue ink which is getting into common use is said to be composed in part of Prussic acid, one of the most poisonous substances in nature. People should be cautious what they do with it.

Use your own rights so as not to injure others.

For the Western Farmer.

MR. G. G. MOORE: Sir, by favor of M. A. Townsend, I have received two numbers of the Western Farmer; he also requested me to write for your columns. I herewith send you the following communication, addressed to him in answer to his letter. If it suits your purpose, you may furnish him a copy of it through your paper. If you do so, you will be likely to hear from me again.

Yours, &c.

THOS. WHITE.

Mt. Pleasant, O., Jan. 12th, 1840.

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Silk Business.

Mt. Pleasant, Jan. 18th, 1840.

SIR: Your letter of the 13th ultimo was duly received, and in reply I may inform you that I am more than ever confirmed in the belief that the silk business will succeed in this country. You have no doubt been informed that I commenced the business some eight or nine years ago. At that time there was no Multicaulis fever; nor any silk fever in the country. I soon became convinced that the business was not only practicable, but that it would soon become very profitable, and finally a great national source of wealth. I came to this conclusion by the force of experimental facts that developed themselves from year to year, as I experimented in a small way on the native leaf. About four years ago I extended my operations and raised and manufactured 80 yards of pongee handkerchiefs; this was done under every disadvantage that was possible to be encountered and overcome by human exertion, with the exception that I fortunately became acquainted with Mr. Robert Fox, a skilful silk weaver, who wove my web. I had every difficulty to encounter that human patience was competent to endure. Limited in my means, a sickly family to attend to, two of whom died soon after—nothing but the native leaf to depend upon, and they scattered over the fields and woods of four or five miles square; no knowledge of the art of reeling, throwing or training of silk, nor any work on the subject that I could obtain any knowledge from—embarrassed in my circumstances, and viewed as a maniac by most of my neighbors on account of my engaging in so visionary a project, as they esteemed the *silk business* to be.

Such were the circumstances under which I commenced the business; and, independent of such circumstances, I have witnessed enough to convince me that the growing of silk is profitable, and will become a great source of na tional wealth.

Within the last two years a very respectable number of the farmers of this vicinity have become equally "*visionary*," and are preparing to engage in the business of growing silk.—You are aware that J. W. Gill took hold and assisted in establishing a factory in this place, which we got into successful operation last August; and if any doubt had existed in relation to the success of the business it must now vanish, for we have succeeded beyond our most sanguine expectations. I am, however, no longer interested in the factory here, but am about to transfer my operations to Wheeling, having taken stock in a company about to be chartered at that place. My residing here will not injuriously affect the establishment. Mr. Gill is fully satisfied with the profits of the business, and he has never lacked enterprise when there was a fair prospect of reward. Wheeling possesses advantages in the manufacturing line that this place can never enjoy, and as I intend to devote the balance of my time to the business, I wish to locate where I can pursue it with the least possible inconvenience.

You inform me that the trade in Multicaulis is dull in your place, and wish to be informed how it is here. The trade here is just as it ought to be; trees sell at fair prices in small lots to practical men who want them for their own use, not for speculation. This *speculating* in the trees has done more to injure the silk business than all the preachers of "humbug" who swarm the country from Maine to Georgia. No man ought to touch a mulberry tree unless he intends to go to feeding worms, if he does, he is only a curse to the bu-

siness, for he causes hundreds of well disposed citizens to doubt there being any reality in the raising of silk, and thereby retards its progress. But the *speculation* in trees is over, thank heaven, and some think the silk business is over also, but in that they are very much mistaken, it is just about to take a fair start. All sensible men who have trees will quietly hold on to them and go to feeding. There are but few trees that will not produce twenty-five cents worth of leaves per annum to the silk grower, and unless he has more foliage than he can use, it is folly for him to sell for less. All things, whether political, commercial or financial, as they are now working, will only tend to make us one of the greatest silk growing nations on earth, and second only to China in point of wealth. Suppose we had been a silk growing nation ten years ago, and had supplied ourselves with that article during that time—we would have saved about two hundred millions of dollars that has been shipped to Europe to pay for silk alone. This enormous sum may be saved to this nation in a very few years, and I have no doubt will be. We may not only save *twenty millions* a year, but we may pay our exchanges to the amount of twenty or thirty millions annually in *silk*, and in less than forty years we will do it. No doubt you think I am a visionary man; so many thought four years ago when I told them we could clothe ourselves in silk, taking the amount of labor as standard of value, at a less expense than we could in cotton goods: the one is now proved, the other *will be.* The political action of our statesmen has crippled, if not destroyed, the commercial and financial interests of the country, it is true; but that has not injured the silk business: it has only reduced the price of mulberry trees a little, which has rather benefited it; it has caused hundreds to turn their attention to the business who it is not likely would have done so if they could have got a dollar a bushel for their wheat; and these are the persons who will do some real good at it. I bought fifty dollars' worth of cocoons of a farmer last fall, who told me that his little daughter, about twelve or thirteen years old, had done all the business of rearing them, and that he had not a blade the less on his farm. Every farmer in our country who has daughters of that age may do the same thing. Sir, the time is not distant when every enterprising, intelligent farmer, will esteem a mulberry orchard as necessary an appendage to his farm, as he now does a fruit orchard; but in order to effect this the tree growers must go to feeding worms, and bring in their cocoons to the factory—then the farmer will see there is a reality in the business; this is now the case in this neighborhood, and may soon be the case in every part of the Union, if those who have trees will go to *using* them instead of trying to sell them at a time when there is no money in the country to buy with. No man should ever think of selling a tree until he can feed a million of worms annually, and have a surplus of foliage.

I know of nothing that is more disgraceful to this nation than the fact, that we are the servants of servants, when we might be independent. We first pay tribute to the southern planter for the raw material, and then to the European pauper for the manufactured goods we clothe ourselves in, when we might furnish ourselves with a better and cheaper article, through the aid of a few little worms. How long will the high-minded sons and daughters of America submit to such a low and degrading debasement? Not long, I can assure you. The spell is now broken, factories are being started, and are doing a profitable business; a demand is created for cocoons, and the farmers in this region are beginning to see there is money to be made at raising them; and you know the farmers love money. They do not often risk much; but when they see there is money to be made, they generally try to get at it if it's within their province. They generally act slow and cautiously, and that is the right action to insure success; hence, what trees we have to spare are being sold in small lots

Yours, with respect,

THOMAS WHITE.

For the Western Farmer.

Preparing Seed Corn.

Mr. Editor: In your last number I stated, probably I might write something on the best mode of preparing seed corn, if no one better qualified offered. On reading a piece in the same number (taken from the Gen. Farmer) on that subject, I feel the more anxious to communicate my own experience and practice; I shall state nothing as fact, but what I know, from experiment and observation, to be such.

The writer referred to, says, "put the corn into a tub, put the tar on the corn, then turn on hot water so as to cover the corn," &c. Now for the effects of this mode.—Sure I am, that hot water being mixed with the tar has a great tendency to weaken the strength, (smell and taste,) of it, which is all that is offensive to the depredator. A farmer once observed to me, he tarred his seed corn one year, and never had it so badly pulled up by the crows as it was that year; well, how did you apply the tar? "why, by putting it on the corn, dry; and stirring it until it was covered, and then planting it." Very well; in a few days after planting it, the moisture and strength of the earth destroyed the strength of the tar entirely, so that the tar was no offence to them. Just so with the corn covered with the tar water, being nearly in a dry, hard state, the tar does not penetrate into the kernel; it may be some little benefit to the growth, by reason of the gypsum, (plaster of Paris) but very little as to depredation. So now for my practice; but in the first place, be sure and shell off the noses and buts so far as the kernels are small and ill shaped, keep them separate from the body of the ear, give them to the pigs, or any thing you please: they will grow, but never produce so thrifty and healthy a stalk or ears, as the plump, well shaped kernel; then shell the body of the ear carefully for preparing. Now for the process.

A day or two before the time designed for planting, having all the materials in readiness, have a kettle (iron is the best) of sufficient dimensions to contain the quantity of corn you wish to prepare, and water enough to cover the corn, and together, not to fill the kettle more than half full, (as you will see presently;) put the kettle, with the water in it, over a brisk fire, heat it boiling hot, then take it off the fire and set it in a convenient position. Take the corn immediately, turn it suddenly into the boiling water, having a stirring-stick of suitable strength ready, catch it, and give two or three stirs quickly; have as much cold water ready at hand, as there is of the hot, turn it suddenly into the kettle, and stir again; this will reduce the heat below scalding,—a part of the water may then be taken out, leaving sufficient to cover the corn two or three inches, for it will soon swell; set it in a safe place, covered, let it stand at least twenty-four hours; on the morning of the day for planting, drain off the water, heat it in another kettle to a good degree, not scalding hot, return it again to the corn for the purpose of warming it to receive the tar; let it stand ten or fifteen minutes, then drain off all the water that will run off freely, by turning up the kettle, preventing the corn from falling out, tip it back and level the corn for receiving the tar. For half a bushel of corn, take about one gill of tar, if it be a little warmed it will spread the easier, but not to heat it; put it on the corn, then stir with a good strong stick one or two minutes, or until the corn is completely glazed over and the grains separated; if the grains are not sufficiently coated, add a little more tar, stir again so that each grain be completely glazed, but not too thick, for if so it will linger in coming up. When the tar is well spread over each grain, throw in gypsum, well ground, (the white is the best,) sufficient to cover the tar, by stirring again until each grain is well covered with the plaster; have a wooden pail or tub that will contain the corn, let it be moistened in the inside with warm water, put the corn therein, and cover it with a thick wetted cloth to prevent its drying, and your seed is ready for planting.

But, I fancy I hear some one inquire, what benefit is all this fuss and parade for preparing seed corn? It will grow if put into the ground without being tarred

and feathered; I answer, great, very great benefit; and first, putting it into boiling water checks and softens the hull or skin at once, and by letting it swell, softens the grain, opens the pores, (for it is porous, else it would not swell,) so that the strength, (smell and taste) of the tar penetrates into the grain, and of course, is not so soon lost by the action of the earth; this secures it from depredation by the crow, squirrel, or worm. In the next place it gives it a much more vigorous and healthy growth, coming up quicker, and of better color, and is of great benefit to the health, vigor and growth of the plant through the season. Try it once, farmers, and you will be convinced. I have prepared my seed in this manner nearly every year, for more than twenty years; crows will sometimes pull up a few spires, but never take the kernel, if they find it tarred in this way; they will soon leave the field, and you no catch them there again. I could give you many more good reasons for the practice, but the above must suffice for the present. A few words, however, by way of caution: on putting the corn into boiling water, be careful you do not let it be too long before reducing the heat, say four or five seconds will never injure it, and it should be planted within two or three days, for it will soon sprout. I have planted it after the root was out an inch long, but I would choose to plant before the sprout appears. If any one should adopt this method, and profit thereby, it will be a great satisfaction to

OLD SIXTY-NINE.

I am inclined to write something for a future number, on the best mode of preparing the ground, planting, and tending the ground throughout the season; although I apprehend the farmers in this section, are tenacious of their usual practice, whether the best or not. But I can advise them of my practice, and then they may try it, or forbear, as they please.

A few words by way of explanation. I see that I have not written so explicit as I might have done. Some one will say, why, you contradict yourself. In your former piece you say, heat injures the germinating quality, now you say put it into boiling water; how is this? Well, there is a seeming contradiction if you do not understand the principle; now then, heat in the fall, so as to induce the inclination to germinate, (sprout) is the principle to be avoided at that season, for if it be but little started then, and dried until the next spring, the germ (chit) is dead, and cannot be restored; but when about to be planted, it is the principle sought for; so you see there is no contradiction in fact, but only in appearance. S. N.

For the Western Farmer.

Agricultural Politics.

THIS caption is seldom seen in print, and equally seldom discussed by agriculturalists. They have no ordinary claims on national legislation,—this branch of industry being the foundation on which all others are to prosper or to decline,—claims and interests rarely pressed, and consequently much neglected.

The United States are capable of being a vast agricultural country,—the greatest in the world—and raising a surplus equal to the consumption of all Europe. The fostering care of our government should be extended over it in the protection and encouragement of this great branch of business; but we lament to see a sad and criminal neglect.

If other nations legislate with a special view of benefiting their agricultural concerns, utterly regardless of our interests, and, if England, with whom we deal most, though incapable of sustaining her dense population by her own agriculture, will not, if she can possibly avoid it, take our bread stuffs, or any thing else than hard money; should no remedy obviate this unequal state of trade?

Yet more. If England's crops fail, reciprocity of trade should induce her to take our surplus produce offered her, in payment of the heavy debts contracted for their manufactures by our merchants, absolutely supporting their otherwise starving, rebellious, and unhappy operatives; but she denies even this—proceeds to drain our country, if possible, of the last specie dollar; disregard-

ing all dangers of bankruptcy in trade and commerce here, ships off our specie in every returning packet, and expends it for bread stuffs on the continent where the population is too dense for its own agricultural resources.

Is there *no call*, in this unequal state of trade and long continuous embarrassments, *upon congress*, for legislative remedy? Unhappily our government is bound and shackled to such a degree by party politics, that no suffering or cause of distress can effectually be remedied. Should a farmer's system of trade correspond with such as our government chooses to pursue, the results would be ruinous. For example—he purchases every article of wearing apparel, furniture, groceries, implements of husbandry, &c., of shop-keepers and manufacturers, who refuse his produce, which he cannot elsewhere sell without loss, and demands his specie, to be obtained at the brokers at a serious loss. He finds at length his money is gone, and his produce ruining on his hands. He must now legislate himself into a more equal state of trade, and it is very simple. Let his independence of shop-keepers and manufacturers' goods be established, and they will be the first, on seeing his independent action, to come to more reasonable and reciprocal trade. Precisely so should government act with foreign nations—but I doubt sometimes whether the united wisdom (in action certainly not,) of congress is equal to the common sense farmer;—"by their fruits shall ye *know* them."

The present times and state of trade very naturally call for such reflections, and it becomes proper for us, as a people, to pause with a retrospective view, in which we may distinctly see the picture just delineated, to be according to truth and soberness.

But, farmers, *are you fully aware* of an all absorbing and destructive derangement for a long time, and now exhibited in our national legislature, under the name of party politics, which engrosses time—sacrifices the greater and lesser interests of our country on its unholy altar,—patriotism being entirely forgotten, or merged into the love of "spoils of office?" This is the disease so long time corrupting our land; in the mean time many manufactories have closed, and very soon, 'tis feared, the productions of our farms will be reduced to prices scarcely indemnifying their cost of transportation to market.

Since the present national legislature neglects to apply correctives in their power, our redress is the ballot-box—select no longer, *mere* politicians, nor lawyers. The first are wholly anxious for the "spoils," the other much the same, with only this difference—unlike Dr. Franklin, precious time is thrown away in their tedious, unprofitable, and unnecessary speeches. That our government has the constitutional power to correct the evil, see section VIII, constitution, "The congress shall have power to lay and collect taxes, duties, imposts," &c. and "to regulate commerce with foreign nations," &c. T. H. A.

For the Western Farmer.

The Culture of Silk.—Standing Statistics.

January 22d, 1840.

Mr. Editor:—Having been frequently called upon for information on all points, connected with the subject of raising the (morus multicaulis) mulberry tree, silk, &c., &c., we have prepared the subjoined. As the experience of many persons engaged in the silk business may not be exactly similar in all cases, it is presumed that what is here stated will be sufficiently near the general results, as to be depended upon.

Cocoonery.—A house twenty-one by twenty-five feet, and one story high, of ten or twelve, with three rows of shelves across the house, of five feet square, and nine tiers one above another fourteen inches apart, will feed one hundred and twenty-five thousand worms at one time. From two to four such crops may be raised in one season. If fires are kept up, five crops may easily be raised. A building of two stories will feed double the quantity.

Trees.—A tree will yield one pound of leaves the first season, when planted early in April, and greatly increase afterwards for several years. Long experi-

ence proves that five thousand pounds of leaves will feed one hundred and twenty-five thousand worms, which will produce forty-two pounds of reeled silk, worth from four and a half to five and a half dollars per pound. Many have obtained one pound of reeled silk from one hundred pounds of leaves.

Eggs, &c.—One ounce of eggs will hatch thirty thousand worms. Twenty-five hundred good cocoons will make a pound of reeled silk. Two hundred and fifty to three hundred cocoons weigh a pound. A moth lays from four to five hundred eggs. The mammoth white, peanut and sulphur worms are all very good to feed. The color of silk does not alter its value, the one commanding as good a price as the other. The pierced cocoons are purchased by those who purchase the perfect cocoons.

There will be a cash market opened in the spring in Cincinnati, for all the raw silk that can be produced. The supply we know will not exceed the demand,—and American raw silk commands a higher price than any made in any other quarter of the globe. More particular information of the market in Cincinnati will be given in due time—we include cocoons also, when we name a market for raw silk in this city, and will be reeled on shares if required. The manufactory of silk will be established in this city in due time. Reels can be had for six dollars, and one reel will do for a neighborhood. Price of cocoons will range between twenty-five and fifty cents per pound.

TABLE,

Showing the number of morus multicaulis plants which may be raised on one acre at various distances which they are planted.

	no. on an acre.
1 foot by 1 foot,	43,560
1½ " 1 "	29,640
2 " 1 "	21,780
2 " 2 "	10,890
2½ " 2 "	8,712
2½ " 1½ "	11,616
2½ " 1 "	17,424
3 " 3 "	4,840
3 " 2½ "	5,808
3 " 2 "	7,260
3 " 1½ "	9,680
3 " 1 "	14,520
4 " 4 "	3,722

Et cetera disunt,

E. HARRISON & Co.

Cincinnati, 1840,

From the London Mechanics' Magazine.

Steam-Plough.

AT a meeting of the Grantham Agricultural Association, Mr. Hanley stated that he had seen a steam-plough at work in Lancashire, which did its work remarkably well, and turned up an acre of wet land, at a depth of nine inches, in one hour and fifty minutes.

—

Ploughing by Steam.—The following is from a late English paper:—

"Some experiments were tried on Friday week at Red Moss, near Bolton, in this county, in the presence of Mr. Hanley, M. P. Lincolnshire, Mr. Chapman, M. P. for Westmeath, Mr. Smith of Deanston, and other men interested in agriculture, with a complete and very powerful steam-plough, constructed by Mr. Heathcote, M. P. for Tiverton. About six acres of raw moss were turned up in a few hours, and turned up in a most extraordinary style; sods eighteen inches in breadth, and nine inches in thickness being cut from the furrow, and completely reversed in position, the upper surface of the sod being placed exactly where the surface had been before. The possibility of ploughing by steam has thus been established, though, as the employment of the steam-plough, in preference to one drawn by horses, will depend on the comparative cost of the two powers, and on that of the implements used, and as there are not at present any sufficient data for judging what the difference of the cost will be, it is not possible to say how far steam is likely to be applied to this department of agriculture. The plough of Mr. Heathcote, though a very powerful machine, appears to us to be much too complex and costly for common agricultural purposes, though we have little doubt that it might be used not only with effect, but advantage, in reclaiming large portions of moss land—such as the bogs of Ireland. Indeed, it

is the opinion of Mr. Heathcote himself, that it would not at present answer to employ it in reclaiming a smaller portion of bog than 1500 or 2000 acres, though it may probably be cheapened and simplified, so as to make it ultimately useful on a smaller scale."

Ashes vs. Rats.

The following method of driving rats from among grain is communicated by a practical farmer, who has practised it for the last two years with entire success. When the wheat is put into the barn, take common ashes and sprinkle over every other laying of the sheaves, which will take several bushels, more or less, according to the amount of grain deposited. The gentleman says, "I have tried this method to my entire satisfaction; for although my barn before was overrun with rats, there is now not one to be found on my farm."

Would not ashes applied as above, effectually prevent the *weevil*, while it would certainly not injure the grain? We would suggest to practical farmers the propriety of communicating the result of their experience in all matters of the kind, as it would do general good to the community, and thus prove a blessing to the agricultural interests.—*Ed.*

For the Western Farmer.

Steeps for Garden Seeds.

It is of very great benefit for many kinds of garden seeds, such as onion, beet, cucumber, melons—all such as have a hard horny covering—that they be steeped at least twenty-four hours before planting them. Steeps may be either a weak solution of salt and water, a weak lye of wood ashes, chamber lye, or the draining of a dung heap. It should be a little warm, and kept so while soaking; when sufficiently soaked, drain off the liquid, put in plaster so as to coat them well by stirring, plant them before they get dry—they will sprout much sooner, and the plaster is of great benefit to the growth of the plant; be careful to thin out your plants, that they be not too near together, it is a great damage to the growth to be too much crowded in the row or hill. A little plaster after the plants come up (on the ground, not on the plant,) is of benefit; but for onions, dry live ashes is the best, sifted on when there is dew on the plant, or in misty weather, and it will keep off the snow flea, a minute black bug, very apt to eat young plants. Try it, and see how the plants will grow. I have practised this mode many years, and I know the benefit.

A few words more; for cucumbers, or melons, the hills should be at least five feet apart each way, and never suffer more than two or three plants in a hill after they begin to creep on the ground, but save the best, thriftiest plants; depend upon it, two plants in a hill is better, will produce more bulk, or weight of fruit in the season than half a dozen. Try it; there is nothing like experiments, for by it the knowledge of agriculture and horticulture are obtained and improved.

Old Sixty-nine.

For the Western Farmer.

Silk Culture.

Much, Mr. Editor, has been written on this subject, and numerous experiments made by others and by myself.

Withal, however, there is a material something lacking yet to constitute this interesting business a successful and profitable one.

We have laid down theories, and schemes of profit, but the tests of experience do not bear us out. I am not unmindful of counter statements made by speculators, and by those who have not passed through experience's ordeal, —they are of no account. I have fine parcels of silk, have tried, and written not a little, as before said, yet I am free to confess there is a mode of operation securing both health to the worm, and far less trouble and pains, *unpractised*, which may be essentially necessary to constitute the silk culture permanently popular and desirable. If not, how does it happen, so many, perfectly desirous of making it a permanent pursuit, have renounced it as uncertain and troublesome? and this cannot be denied—their worms have perished by disease or produced cocoons of no value.

My object, sir, is not at this time to suggest any valuable improvement, but to offer such information of the Asiatic mode witnessed by Miss Pardoe, in Broussa, as may obviate the difficulties under which Americans labor. I have not seen any periodical notice her remarks, and presume it has not been seen by editors. The plan at Broussa, so successfully practised, has two advantages, viz:—Secures health and industry to the worm, and a saving of two-thirds of *our* labor and pains; and this is the grand desideratum. Her remarks are so interesting, that we shall give more than at first intended. The words I have italicized are precisely to the point in view.

On her approach to Broussa she met gangs of donkeys carrying neatly packed piles of mulberry boughs, &c. She counted upwards of two hundred horses, mules and donkeys, the morning after her arrival, bearing closely packed loads of mulberry boughs, in one day, and through only one gate of the city; and as the immense plain is covered with mulberry trees, which are each year cut closely down to the trunk, the consumption may be imagined.

"Our next object," she continues, "was to inquire the mode of feeding the silk worm, which produced in the neighborhood an extraordinary quantity of silk. We accordingly visited the establishment of a Frenchman, who exports the raw material to Europe. I was struck with the color of the silk, which was of a dingy white, and learnt that in despite of all the efforts of the feeders, they seldom succeeded in producing any other tint, although the worms are themselves of different qualities and colors, varying from a dead white to a dark brown, and are fed with the leaves of both the red and white mulberry indiscriminately. The most experienced feeders, however, give a decided preference to the wild white mulberry, &c. The silk when first spun, is of a clear, silvery, brilliant tint; but submersion in the highly mineralized water of the neighborhood robs it of its gleam and reduces it to a dead dingy color.

The Asiatic method of rearing the worm *is totally different* from that of Europe, and according to accounts given to me *much more profitable* in its results as well as *simple in its process.* The insect has a natural dislike to being handled, which is inevitable *when fed day by day*, and the withered leaves of the previous morning cleared away; the discomfort produced by the touch, rendering the worm lethargic and retarding its growth. *The Asiatics never approach it with the hand*—when it is hatched the floor of the apartment is covered with layers of mulberry branches to about three or four inches in depth; and upon these the insects are laid and *suffered to feed undisturbed until their first sleep*, when they are covered with a fresh supply of boughs similar to the first, through which they eat their way until the next change. This operation is repeated four times, always at the period when the worm casts its skin. On the first appearance of an inclination to spin, boughs of oak, of about four feet in length, stripped of their lower leaves, are planted close in the bed of mulberry branches, on which the insects produce their cocoons. Every crevice of the apartment is carefully stopped to prevent the admission of air, and a fire of charcoal ashes is kept up constantly throughout the day and night. It appears to be certain that this mode greatly increases the quantity of silk, and diminishes the labor of the feeders," &c. &c.

T. H. A.

Weight of Grain.

It may be interesting, and possibly of real utility to young farmers, to give the average weight of some of the most common kinds of grain and grass seed.

Wheat,	mean weight . . .	60 lbs.
Rye,	do.	56
Barley,	do.	48
Oats,	do.	35
Indian corn,	do.	58
Peas,	do.	63
Beans,	do.	62
Red clover,	do.	64

The weight often varies a few pounds to the bushel, according to the season and climate, soil and culture, and variety of seed. Wheat has weighed as high

as sixty-seven and a half pounds, and Indian corn sixty-four pounds per bushel. Some barley has weighed as high as fifty-four pounds. On the other hand, grain has often weighed less than the number of pounds above given, as unfavorable circumstances have operated. Wheat has fallen as low as fifty-five, rye as low as fifty, and barley as low as forty-five.

From Hovey's Horticultural Magazine

Culture of the Strawberry.—Results of the culture of some of the new varieties of Strawberries, recently introduced into this country; with the method adopted.—By the Hon. E. Vose.

A good many persons having attempted the cultivation of the new large growing kinds of strawberries, with very various success, I will, agreeably to your request, state the results of my own experiments with some of them, and of which you have, I believe, seen specimens of the fruit, which have at different times been exhibited at the horticultural shows.

The Downton, or *Knight's Seedling*. This variety, almost every one knows, was produced from seed, by the venerable Mr. Knight, president of the London Horticultural Society; and first introduced to notice in this country, I believe, by S. G. Perkins, Esq.

The soil upon which my strawberry plat is situated, is constituted of a light mellow loam, resting upon a sandy subsoil, somewhat sheltered from the northwest. In the latter part of August, suitable preparation having been made, old rotten manure to the depth of two or three inches, was turned into the full depth of the spade; and the beds lined out, so as to leave the rows *twenty* inches asunder, and the plants *fourteen* inches from each other in the rows, placed in the quincuncial order. Before the severe frosts set in, they were covered slightly with leaves, and a little old manure thrown on top to prevent their being blown away. Scarcely a plant suffered through the winter, and the first year, the stools consisting of single plants, the quantity of fruit was small; many of the berries were, however, quite large, and of the coxcomb shape. The next season the stools had become well established; and in April the leaves and manure with which it had been covered, were pointed in, and the beds dressed. When coming into bloom, and before the fruit had set, the spaces between the rows, and between the stools were wholly covered with newly mowed grass, cut from the banks and turf edges round the walks. This was used as a substitute for, and in preference to straw; it is more easily arranged about the stools; and it is readily obtained, as it is required about the period when you wish to crop the banks the first time. "Grass cut from lawns," is recently recommended in Loudon's Magazine for the same purpose; although it is not many years since, that Sir Joseph Banks advised a return to the old practice of the use of straw, (from which this fruit has derived its name,) as preferable to the many contrivances of trenches between the rows, boards laid lengthwise, and tiles, which have been substituted for the same object.

As it is possible that every person who may be about planting a strawberry bed, may not be aware of the uses of the grass, I will allude to them. In the first place, it protects the plants against drought, by shading their roots from the sun's rays, and also by resisting the escape of the moisture, which would otherwise evaporate in the atmosphere. Of all the large sorts, the *scapes*, or stems, are too feeble to support the fruit, when ripe, in an upright position, consequently, all that which grows on the outside of the stools falls into the soil, and is, of course, spoiled; heavy showers, too, beat up the soil over much of the fruit, and make it *gritty*. When the beds are dressed in the spring, it is desirable not to disturb them till the crop is gathered, and the grass serves to keep the weeds down. It is said also to prevent the attack of slugs, as they cannot pass over it.

This was properly the first bearing year, and nothing could look finer than the vines when in fruit; the crop was abundant; many of the berries were of the coxcomb form, and some of them assuming circular aud fanciful shapes, with the *calyx* nearly invisible in the centre.

After the fruit season had passed, the grass was removed, and the vines were permitted to extend themselves, and such of the runners as had not been used, were dug in before covering in the autumn, so as to keep the stools entirely distinct.

The next year, the stools having increased in size, the quantity of fruit was greater in proportion; the berries, however, were much more generally conical in shape. The third season, which was the last, the product was fully equal to the previous one.

The flavor of this variety being equal to the smaller sorts, and the flesh finer and more delicate than any of larger ones, it is, on all accounts, entitled to a preference over any of the new varieties which I have cultivated.

It is important, however, with the Downton, in making a bed, that the runners be all taken from fruitful plants, bearing, as it does, its *staminate* and *pistillate* flowers on different roots; there is danger of obtaining some that are called *males*, which are entirely useless, and exhaust the soil to no purpose; and, as they are not weakened by the production of fruit, the runners extend themselves much more rapidly than the others. It is not long since, that, in England, it was thought necessary, in planting, to apportion *one* sterile to about *ten* fruitful plants; but this opinion is exploded, and now all but the fruitful ones are carefully avoided; nor is it necessary to wait for the flower to determine them; the difference is perceptible in the foliage, that of the sterile being much more rank and coarse.

Wilmot's Superb. This variety, which has excited so much admiration in Europe, treated in the same mode as the Downton, (I have, in fact, employed the same method with all the large sorts which I have attempted to cultivate,) was abandoned, after the second year; the product being so small as not to warrant farther trial.

Keen's Seedling. This has succeeded well; it is a good bearer, and of fine flavor; not quite equal to the *Downton* in either point; but its large, dark, rich berries are altogether a beautiful fruit, and it well deserves cultivation.

The last season, an individual at East Cambridge produced an abundant crop, and larger fruit than I have ever before seen of this variety; whilst other persons, experienced cultivators too, have given up this, as well as the *Downton*, after a trial, for want of success. In the cases of failure, there seems to have been one radical error; that is, the plants have been placed upon strong, rich garden soils, and often somewhat moist: whether such soils are too adhesive to permit the fibres sufficiently to extend themselves, or the nutriment which the plant absorbs be unfit to form the basis of fruit, is a matter of mere theory, which is of no importance, so long as the facts which the results exhibit are before us, and which have been, as far as my own observations have extended to such situations, a profusion of foliage, but little or no fruit.

Methven Castle, or *Methven Scarlet.* This strawberry, more hardy than any of the large kinds, is very prolific; but the fruit is somewhat spongy in the centre, and it has not the fine flavor of some other sorts; still the magnificent appearance of its enormously large globular berries, renders it a desirable object of cultivation to a certain extent. The question has often been agitated, as to the comparative merits of these new large varieties, with some of the older and smaller ones. With all the *smaller* fruits, size and appearance certainly weigh a great deal in the estimate of their value; and almost every cultivator would be desirous of growing a proportion of the fine large sorts; and, with proper management, they would unquestionably well repay him; still it is not to be denied that they require to be treated with a *good deal more care and attention* than the small ones, to expect success. Of the latter kinds, I have made trial of several varieties, among which the.

Early Virginia, or *Early Scarlet*, is a valuable one: it is of fine flavor, produces a fair crop, and, as it serves to lengthen out the season of this delicious fruit, it is well worthy of cultivation.

It comes into bearing ten days earlier than any other variety.

Wood Strawberry. This old variety has excellent properties: if well cultivated, a greater crop may be obtained from the same space than of any other kind: the period of its ripening is of long duration: it may be cultivated with as little labor, and it will produce well for three successive years, on beds running into mats. With this, as with all other fruits, the red is of higher flavor than the white.

Alpine. This old variety may be managed very similarly to the *Wood:* it has been sometimes recommended to cultivate it by seed, as a preferable mode to using the runners, but it is believed without much reason. I once attempted it with the *White Alpine without runners;* the seed, thought to be very choice, was received from the Horticultural Society of Paris. The plants were brought forward in a frame, and at a proper period they were transplanted; the stools enlarge themselves by offsets, and, like all this variety, it continued bearing till into autumn. Its extremely long and slender fruit had nothing peculiar in its flavor, nor did it seem to be worthy of cultivation, farther than as a matter of variety.

It is desirable, in a private garden, to make a new bed annually, which will enable the cultivator to turn in an old one at the same time, and still keep up a succession; as the strawberry is a great exhauster of the soil, the ground occupied by the old bed should be appropriated to some other crop.

Some distinguished cultivators have recommended burning the vines; in the spring they put on a covering of dry straw, an inch in thickness, and set on fire different portions of the same bed at three different periods. It is said to lengthen out the succession of the crop, and that the product is much larger. I have had no experience in this practice. The results of the exertions which have been made in this vicinity within a few years to improve the cultivation of this fruit, are very apparent, as seen in the increased quantities which the market of the metropolis affords, as well as in the introduction from England of those large and splendid varieties, which, till very recently, were unknown, even in that country; and when it is recollected that the English catalogues now contain over *one hundred* distinct varieties, and that they are constantly increasing, and that such are the facilities with which new and valuable fruits are now obtained from abroad, it may reasonably be expected that the number of choice varieties will not only be augmented, but that the period is not distant, when a fruit, which is as universally a favorite as it is simple and harmless in the use, will be produced in quantities more commensurate with the wants of the community.

E. Vose.

Dorchester, Feb. 15, 1836.

We commend the following to the attention of our readers, not only because of its intrinsic worth, but because it was one of the last efforts of its lamented and distinguished author.—*Ed.*

Judge Buel's Address, to the Agricultural Institute of New-London and Windham Counties.

Gentlemen—Farmers and mechanics form the great body of our population. Their influence upon public manners and morals is consequently great. Their labors consti ute the principal source of our wealth.—They are to the community what the body is to the animal system—the seat of nourishment, of vigor, and of life. Though reciprocally beneficial to each other, the limbs would perish without the support of the body, while the body could live without the aid of the limbs. So in society, the different professions are reciprocally beneficial to each—they are all necessary to social and refined life; yet they are not all *equally* important to our well being. We might better spare a limb than to suffer the body, upon which all the limbs are dependant for life, to sicken and die. Productive labor, then, being the great fountain of wealth, and the source of moral health to the body politic, should be fostered and honored, that it may more abound; and it should be enlightened, that it may better subserve its high purposes to society.

It must be apparent to all who can carry back their recollections to the commencement of the present century, that the useful arts have been undergoing, and are continually undergoing, rapid and wonderful changes in the economy of labor, and in the utility of results.—This change has been less, or rather less general, in the business of farming than it has in the mechanic arts, owing to the fewer facilities which the farmer possesses of acquiring useful knowledge in his business, by reading and personal observation. An improvement in the mechanic arts is no sooner made, than it becomes known, is adopted, and rendered profitable, in every part of the country; while improvements in agriculture, however important, travel slow, are received with distrust, and adopted with reluctance. To keep up with the spirit of the age—to prosper in our business and benefit the community, we must sedulously avail ourselves of all the prominent improvements which are going on in agriculture and the mechanic arts, and endeavor to infuse into those around us a spirit of industry, emulation and enterprise. For man does not live by his own labor alone. His success depends upon his being able to sell the surplus products of his labor to those who are able to pay for them, and to exchange the avails of his sales for such articles as he does not produce, and of which he stands in need. Hence he who is surrounded by prosperous neighbors can sell and buy to better advantage than he who is surrounded by poverty and want. I therefore lay down this proposition, that a man, whatever be his honest business, is profited by the prosperity of his neighbor, be that neighbor a farmer, a mechanic, a manufacturer, a merchant, a lawyer, a physician, or a clergyman: and that consequently, the true way to advance his individual interest is, to endeavor to improve the condition of his neighbors. It is a bad trait in the human character, and one which generally defeats its object, but which is nevertheless too conspicuous, that many seek to elevate themselves by depressing those around them—as if the poverty and misfortune of the one, added to the merits and virtues of the other. Not only self-interest but philanthropy and Christianity enjoin, that when we have provided comfortably for ourselves and our own, we should render all the assistance in our power to our brother who stands in need of our aid. The selfish being who lives but for himself, may, by amassing useless wealth, enjoy his hour or his day of fancied greatness; but he can never realize the pure, the elevated pleasures which flow from a life of active benevolence to the human family.

The farmers and mechanics who have united in this celebration, have many interests in common, and they do well to cultivate, in this way, kind feelings towards each other. They are neighbors; and there should be an interchange of good offices maintained between them, to heighten the pleasures of social intercourse—one of the chief enjoyments of society. It has been said that in fixing on a location for life, the grand requisites to comfort are, pure air, good water and a healthy soil; yet these seem incomplete, at least as regards comfort, without the addition of good neighbors. And with a right temper of mind, an individual may contribute much to make good neighbors. But the interests of the farmer and mechanic are otherwise intimately connected. They are mutually dependent upon each other for the comforts and necessaries of life. The farmer wants the fabrics of the mechanic —the blacksmith, the hatter, the cabinet-maker, the tailor, &c.; and these in turn want the bread-stuffs, the meat, the butter and cheese, the roots, and the raw materials of the farmer. Both classes are best accommodated by an interchange of commodities. If the farmer can exchange with the mechanic, at home, enough of the surplus products of his farm to buy what he wants of the mechanic, the expense of transportation to market, of both parties, is saved, and the uncertainty of sale, and the danger of loss, obviated. It is much better to exchange, at home, the products of each other's labor, for a fair equivalent, than to trust to the contingencies of a foreign market.

On the old continent, some men are born to rank and privilege, and others are born to servile labor. Arbitrary laws have prescribed, to a great extent, a man's condition in life, ere the infant breathes the vital air.—Arbitrary power has perverted, then, the laws of equality, which were intended for the human family, and has enacted artificial distinctions, which industry and genius can hardly surmount, nor hereditary rank hardly sink below. We know no such distinctions among us. We recognize neither the hereditary distinctions conferred by birth nor wealth. With us

"Merit makes the man,
Want of it the fellow."

And this merit is the reward of individual effort, the prize of intelligence, industry and virtue. And the competition is open to all. We are endowed with natural capacities for improvement, like the soil we cultivate; and our reward, like the harvest, will be greater or less, in proportion to the measure of our self-improvement. But as with the rich soil, where nature has done most, man generally does least, so with the mind, where the expectations from parental aid are the greatest, the offspring seem least anxious to exert themselves to fulfil the high obligations imposed upon all. Poverty and want are often the strongest stimulants to physical and mental exertion; and when a laudable ambition is awakened to excel in any useful pursuit, it seldom stops at mediocrity. Adversity, more than prosperity, is the school in which men learn wisdom.

There are other high responsibilities resting on the farmer and mechanic, which should stimulate them to mental and moral exertion. They constitute the physical and political strength of our country. If they are ignorant, poor and dependent, they are very liable to become the tools of demagogues, and the corrupters of public morals. If they are intelligent and prosperous, they will be exemplary in their habits, strong in their influence, and independent and patriotic in the bestowing of their suffrages.

With these incitements to improvement, and these duties and responsibilities before them, the farmer and the mechanic have abundant cause to put forth their best exertions, to study the principles of their business, and to profit by the genius and talents of others who excel in their respective callings; for however a man is gifted naturally, or however successfully he calls his physical and mental powers into action, he may learn much from the skill and practice of others.

The establishment of fairs is one of the most efficient means of improvement. They bring together the ingenious products of labor, from the exhibition of which every individual may learn something useful, to improve his mind and his business. They promote friendly intercourse and excite to laudable emulation; they enable their members to see, in contrast, the weakness of want and the strength of innate independence; in fine, they put in motion a thousand springs to self-respect, to industry, and to usefulness.

Another prominent means of improvement is the periodicals of the day, which treat of agriculture and the mechanic arts. These record the discoveries and improvements which are daily making in their respective branches of productive labor, and are written by practical men, or by men of science, with a view to benefit labor. I am sure I do not exaggerate, when I say that individuals have been benefited hundreds of dollars by an outlay of one dollar for a publication of this kind, in consequence of the useful information it has given him in the prosecution of his business. These discoveries and improvements in farming and the mechanic arts are continually going on, and he that will, may, by a moderate expenditure, largely profit by them.

The great secret of success in agriculture, consists in adapting our crops to our soils, in fitting the soil for their reception—in feeding them well, and in giving them proper culture; and the obstacles to improvement are, ignorance of the principles or science of agriculture—a blind adherence to old practices, and a parsimony in expenditure. We better understand the economical man-

agement of animals than we do of plants. We all know that we cannot make fat beef, or pork, or mutton profitably, without we feed high. It requires a certain amount of food to keep an animal in condition—all beyond this which the beast can consume, digest, and assimilate, is virtually converted into flesh. Now, it makes a vast difference whether this extra food is converted into flesh in three months or in twelve months; because, in the former case, three-fourths of the ordinary food required to sustain life and condition for a year, is saved to the feeder, besides an equal expense in attendance. It is precisely so with our crops. *One* well fed acre is more profitable than three poor fed acres, because it requires but one third of the labor, and will, oftentimes, give an equal or a greater product. Take Indian corn, for example, the average product of which I will assume to be thirty bushels to an acre. Now, if we make an acre of suitable soil rich with twenty-five loads of unfermented dung, and tend the crop well, we may get ninety bushels of corn from the acre—and the amount has often been swelled to one hundred and one hundred and twenty. Here, then, is a net of gain of sixty bushels by feeding an acre well, over the net gain of an acre not fed at all. In regard to the cost of the manure, call it, if you please, twenty-five dollars, and consider it capital expended. If you deduct this from the profits of the well fed acre, there would still remain a difference in favor of the latter, according to the common scale of prices, of thirty-five dollars. If you merely charge the interest on the outlay, this would be $1,50, and would diminish the difference between the good and bad acre but this amount, or would still leave the crop on the rich acre worth $58 more than that on the poor acre. Estimate the farmer's corn crop at ten acres, and you will perceive that the cultivator of the ten good acres realizes a net profit of $580 more than the cultivator of the ten poor acres. Carry out this comparison to the products of the whole farm, and we shall at once discover why the good farmer finds a profit in an outlay every four years, of twenty dollars an acre, in enriching his lands. But if we suppose, what is in fact, the truth, that the long manure, which causes this great increase in the corn crop, is as good for the next crop as it would have been had it been summer yarded, as was wont to be, and is now often the case, the absolute additional expense is nothing—the food of the corn crop is absolutely saved to the farm. I might carry these illustrations to other crops, to farms, and to districts of country. In my late journeyings in the states of New York and New Jersey, I have seen many farms, and some districts, where the intrinsic value of lands has been enhanced a thousand per cent., or in a ten-fold degree, by the almost magic influence of improved husbandry, based upon the principle of working no more land than can be kept rich and worked well. Having gone into details in these matters on recent public occasions, I forbear repeating them here.

It should be borne in mind, that the elementary matters which constitute animals and vegetables are similar, though differently combined in animals and plants, and in different animals and in different plants. They are principally oxygen and hydrogen (the constituents of water,) nitrogen, which with oxygen, forms the volume of the atmosphere, and carbon, the substance of charcoal. These elementary matters are found in all the combinations of matter—in a solid in animals, vegetables, and rocks. By the interposition of caloric, or the matter of heat, they are rendered liquid and gaseous—liquid in water, and gaseous in the atmosphere. When they disappear in one form, they take another —they are never lost, never annihilated. They perform a constant routine, under fixed and established laws, termed natural laws, for the benefit of man, and for the order and preservation of the natural world. As soon as the animal and vegetable cease to live, a decomposition or separation of their elementary parts commences, if exposed to the agency of heat, air, and moisture, and goes on until their organic forms are lost, and their elements are mingled with the soil, and fitted again to enter into new vegetable

combinations, and are taken up with the moisture of the soil, by the spongioles, the mouths of plants, or are imbibed by their foliage, and become again parts of new and living organic matters. Thus the products of the soil are consumed by the animal, and these elementary matters become flesh, and its natural appendages, or they are voided by the animal, and decay upon the soil. When deprived of their vitality, they soon resolve themselves into manure, and when these animal and vegetable substances, known by the general name of organic matters, are blended with the soil, they become the proper food for new generations of vegetables.

These facts suggest to the farmer, who would keep up the fertility and productiveness of his soil, the necessity of—

1st. Consuming his crops, as far as is practicable, upon his farm, or of returning to it an equivalent, in manure, for what he carries off;

2nd. Of carefully husbanding every animal and vegetable substance which he can command, of preserving it from waste, and of faithfully and judiciously applying it to the soil, as food for his crops; and

3d. Of studying those laws of nature which govern, to a greater or less extent, the whole business of the farm, and which cannot be violated with impunity.

I am aware that something further is necessary to satisfy the wants of the farmers in old settled districts—that their lands have been deteriorating under a bad, a skinning system of husbandry, until they require extra stimuli, other than the ordinary vegetable products of the crops, to bring them into a state of profitable culture. These extra means of inducing fertility are abundant. They may be found in almost every district or upon every farm, and no intelligent or spirited farmer need hesitate about employing them. As I have said, nothing is annihilated. The vegetable matters, the humus, or the geine, or whatever term we choose to give to the food of plants, which originally existed in our soil, are not lost—they have merely changed position. It is the province of the farmer to restore them to their place of usefulness, and his reward will be commensurate with his labors. These fertilizing matters, it is true, have, to a great extent, been lost to present, though not to future usefulness. They have been dissipated by winds; they have passed into the sub-soil; they have been wasted by the rains, washed into swamps, rivers, and the ocean;—and yet they are, in a measure, recoverable, and may be made again to feed our crops and renovate our husbandry. These great changes cannot be effected by ignorance and hereditary conceit, nor in a day. They must be the work of patient industry, of liberal expenditure, of scientific knowledge—of a generation. I will proceed to enumerate some of these means of renovating the fertility of the soil:

The first I shall name is a thorough system of draining. Many of our wet grounds have become rich in the elements of fertility at the expense of those which are naturally dry. There are certain coarse grasses which indicate the presence of surplus water within the range of their roots. In these vegetable matters, the food of plants do not decompose, or, to employ a term analagous to animal economy, do not digest, by reason of the exclusion of heat and air. No cultivated crop will do well in such situations, not from a lack of the elements of vegetable food, but from the inability of the vegetable stomach to digest it, and which, like the dyspeptic stomach of man, is rather injured, than benefited by excess. Drain these lands thoroughly. Let in the genial influences of the sun and the atmosphere, and cultivate them—the process of digestion or decomposition will go on, and the soil will render a liberal tribute to the cultivator.

In some cases draining will not suffice to induce fertility, by reason of an excess of vegetable matter, which resists putrefaction. This is no misfortune to the owner. If this peaty or vegetable matter is placed in his cattle yards for a season, to the depth of twelve or eighteen inches, exposed to the tread of his cattle, and becomes intermingled and saturated with their dung and urine, or

placed in piles with fermenting materials, it will undergo fermentation, and may then be blended with the soil to certain advantage. Another mode of converting these matters into the food of vegetables, is to pare and burn it in smothered piles, and to spread the ashes upon grain and grass grounds; and still another mode, which has been successfully practised, is to carry on to these drained grounds, earthy materials, and to blend them with the vegetable surface.

[To be concluded in our next.]

Antidotes for Poisons.

The following communication from Dr. Hall will be read with interest at this time. Every family should keep the antidotes named by Dr. Hall, laid up where they can be instantly obtained in any case of emergency. When an active poison is taken, the only safety of the sufferer is in the *immediate* application of an antidote. A short delay is fatal.

'Every bitter hath its sweet—every poison its antidote.'

The repeated cases of poisoning which have recently occurred in this village, have induced me to make public some of the most efficient antidotes for poisons, especially for those which are found in the domestic department of almost every family. I am induced to make these 'antidotes to poisons' public, because in instances of poisoning, from accident or otherwise, the urgency of the case does not allow us to wait for medical assistance, which is scarcely ever obtained without some delay, and consequently of comparatively little or no avail when it is, and the life of an individual is often lost by waiting, when by prompt interference it might have been saved.

I have confined myself to mentioning those antidotes, which are the most simple and the most easily obtained; and it is worthy of notice, that *those* are the very articles that are most effectual. The practice of forcing down large doses of powerful and irritating emetics, which in themselves are almost sufficient to destroy life, cannot be too strongly reprehended. When emetics are necessary, as they sometimes are, especially in those cases of poisoning by substances which produce great torpor of the system, (such as opium and all the narcotics) the safety of the patient requires that the dormant energies of the stomach be aroused. In these cases, nothing is better to be given than ground black mustard, a large teaspoonful of which may be mixed with water and swallowed at once. It operates very promptly—it is perfectly safe, and nothing can be more effectual.

As a general rule, the effects of poisons are better counteracted by articles, which being taken into the stomach *immediately* after the poison is swallowed, enter into combination with the poison, and form with it a new substance, either harmless in itself, or incapable of being acted on by the fluids of the stomach.

For *Oil of Vitriol*, the best antidote is large doses of Magnesia and water, or what is still better, equal parts of soft soap and water.

For *Aqua Fortis*, same remedy as last.

For *Oxalic Acid*, (this resembles Epsom Salts, and is often used for bed-bug poison.) Chalk and water renders it perfectly inert, forming an insoluble salt of lime. Magnesia is also a good antidote.

For *Tartar Emetic* in poisonous doses, Peruvian Bark and water renders it harmless; if that cannot be procured, use a strong decoction of tea until it can.

For *Saltpetre*, (which is also sometimes mistaken for salts) a prompt emetic of mustard and water—afterwards mucilages and small doses of laudanum.

For *Opium or Laudanum* in over doses, an emetic of mustard, constant motion in a wagon or otherwise, and the stomach pump when it can be obtained.

For *Lunar Caustic*, (the principal ingredient in indelible ink,) common salt forms an insoluble substance which is harmless.

For *Corrosive Sublimate*, (this is the most common bed-bug poison, but it has probably destroyed as many persons as bed-bugs.) The whites of eggs mixed with water is the best and most effectual remedy. This should be given until free vomiting takes place. (Albumen renders this poison harmless; the whites of eggs are mostly albumen.)

For *any of the Salts of Copper*, the same remedy as the last.

For *Arsenic*, three or four cases are reported as having been cured by doses of Magnesia. But the only sure antidote is the *freshly prepared* hydrated peroxide of Iron. This is not always at hand, and cannot be prepared except by a physician or an apothecary.

Hampshire Gazette.

From the Yankee Farmer.

Useful Hints.

Mr. Editor:—In your last paper (No. 41) I noticed an article under the caption of 'Curing a Bad Horse,' which reminded me of a circumstance which once transpired within my own observation, and which may be new to some of your readers, and will properly come under the same head. A gentleman in the neighborhood of my residence owned a valuable horse that would, whenever he pleased, (and that was not very seldom, especially if he had been hard driven,) lie down in the harness. Whatever might be the carriage in which he was, whether chaise, wagon, sleigh, or in the plough field, down he would lie at pleasure, and not all the whipping, coaxing or *hiring* could induce him to move until he pleased, which would frequently be from two to three hours.

A couple of young blades wishing to take a sleigh ride one day, this being the smartest and handsomest horse in the neighborhood, they hired him. On their return, when about three miles from home, down he went. They worked about half an hour endeavoring to coax him to move, and then applied the lash most thoroughly, but without the least effect. They finally came to the conclusion that if he would not go home with them he should not go without them,—that he should be stabled on the spot for the night; and accordingly they stripped off the harness and with the bridle tied his legs together firmly, and took lodging in the nearest house. Early in the morning they repaired to the spot where they left him, and found by the snow where he lay that he had made a number of ineffectual efforts to get up. They unbound him, and very soon found him upon his feet. They harnessed him and drove him home, and never after was he known to lie down in the harness. Thus, what was done to gratify their spirit of revenge proved to be of much advantage to the owner.

A man attempting to break a yoke of three year old bulls, found that one of them was sullen and would lie down in the yoke. He took the yoke from his neck, and bound him so that he could not get up, and left him for a number of hours, and thereby effectually cured him of his habit of laying down.

This is not a very troublesome way of breaking animals addicted to this habit, and it may be well for those who have occasion, to try it. S.

American Wood Superior to Mahogany.

We saw standing in the Arcade Hall yesterday, a well made and highly polished *Bureau*, made by Shaw & Tucker, St. Paul street, Rochester. This sample of the skill of our artisans is not only highly creditable to them, but also to the city in which they live. But aside from the skill manifested in the workmanship of the Bureau, it possesses additional interest from the fact that the veneering, exhibiting a polish of the highest grade, is the product of the American forest, and prepared to the sculptor's hand at the veneering mill of Mr. Whipple in this city. The veneering is of *Black Walnut*, and was introduced by Mr. Whipple as a substitute for Mahogany, about two years since, and though its use is of such recent date, it is superseding Mahogany wherever it comes in competition with it

It has already become a general favorite in Canada among those who seek to adorn their mansions with the choicest furniture. The Black Walnut is also rapidly coming into favor in England, though its introduction there is of quite recent date. This wood, from which such rare specimens of art are produced, is abundant in the American forests, and though it has hitherto suffered comparative neglect, it seems destined to a celebrity surpassing that of the famed Mahogany.—*N. Y. Paper.*